

WHAT IS CLAIMED IS:

1. A method for updating the existing firmware in a device with replacement firmware, comprising the steps of:

- 5 downloading the replacement firmware to the device;
 storing the replacement firmware in a storage location in the device;
 determining if the replacement firmware was successfully downloaded to and stored
at the device;
 setting an indicator in the device if the download and storage of the replacement
10 firmware was successful; and
 replacing the existing firmware with the replacement firmware during the first boot
of the device following the successful download and storage of the replacement firmware to the
device.

- 15 2. The method for updating the existing firmware in a device with replacement firmware
of claim 1, further comprising of transmitting a message to indicate that the download and storage
of the replacement firmware was successful.

3. The method for updating the existing firmware in a device with replacement firmware of claim 2, wherein the step of replacing the existing firmware with the replacement firmware further comprises the steps of:

initiating a boot of the device;

5 determining whether the indicator identifies that the replacement firmware was successfully downloaded and stored to the device;

if the indicator identifies that that the replacement firmware was successfully downloaded and stored to the device, replacing the existing firmware of the device with the replacement firmware;

10 clearing the indicator; and

executing the replacement firmware as part of the boot of the device.

4. The method for updating the existing firmware in a device with replacement firmware of claim 3, wherein the device comprises a hard disk drive.

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5. The method for updating the existing firmware in a device with replacement firmware of claim 4, wherein the storage location is disk storage in the hard disk drive.

6. The method for updating the existing firmware in a device with replacement firmware of claim 5, wherein the existing firmware is stored in flash memory on the hard disk drive.

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7. The method for updating the existing firmware in a device with replacement firmware of claim 6, wherein the step of replacing the existing firmware with the replacement firmware comprise the step of writing the replacement firmware to the flash memory location of the existing firmware.

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8. A network operable to update the firmware of a device of the network, comprising:
a host computer;
a device coupled through one or more network elements to the host computer, the
device being operable to:

5 download replacement firmware from the host computer;
save the replacement firmware to a storage location in the device;
determine if the replacement firmware was successfully downloaded and
saved to the location in the device;
set an indicator if the replacement firmware was successfully downloaded to
10 the device; and
if the replacement firmware was successfully downloaded to the device,
replace the existing firmware of the device with the replacement firmware during a boot of the
device.

15 9. The system of claim 8, wherein the device is further operable to clear the indicator
following the replacement of the existing software with the replacement software.

10. The system of claim 9, wherein the device comprises a hard disk drive.

20 11. The system of claim 10, wherein the storage location of the replacement firmware is
disk storage of the hard disk drive.

12. The system of claim 11, wherein the storage location of the existing firmware is flash
memory of the hard disk drive.

13. The system of claim 12, wherein the device is further operable to replace the existing firmware of the device by reading the replacement firmware from its location in disk storage and write the replacement firmware in the location of the existing firmware in flash memory.

14. A method for providing a firmware update in a remote device, the method comprising the steps of:

transferring the firmware update to the device;

storing the firmware update in a storage location in the device;

5 setting an indicator in the device if the steps of transferring and storing the firmware update were completed successfully;

setting an indicator if the download and storage of the firmware update was successful to indicate that a firmware update is available; and

10 updating the existing firmware with the firmware update during the next boot of the device.

15 15. The method for providing a firmware update in a remote device of claim 14, wherein the step of transferring the firmware update to the device comprises the step of downloading the firmware update from a remote source.

16. The method for updating firmware in a remote device of claim 15, further comprising the step of transmitting a message indicating that the download and storage of the firmware update was completed successfully.

20 17. The method for updating firmware in a remote device of claim 16, wherein the step of updating the firmware during the next boot of the device comprises the steps of:

monitoring whether the indicator has been set to indicate that replacement firmware is available;

25 writing the firmware update to the storage location associated with the existing firmware of the device; and

completing the boot of the device with the software of the firmware update.

18. The method for updating firmware in a remote device of claim 17, wherein the step of writing the firmware update to the storage location associated with the existing firmware of the device comprises the step of writing the firmware update over the existing firmware in the flash memory of the device.

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19. The method for updating firmware in a remote device of claim 18,
wherein the device comprises a hard disk drive; and
wherein the step of storing the firmware update in a storage location of the device
comprises the step of storing the firmware update in disk storage on the hard disk drive.

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20. The method for updating firmware in a remote device of claim 19, further comprising
the step of clearing the indicator in the device following the step of writing the firmware update over
the existing firmware in the flash memory of the device.